

Endotracheal tube fixation in neurosurgical procedures operated in prone position

Sir,

Neurosurgical procedures operated in the prone position carry risk of endotracheal tube (ETT) dislodgement, which is potentially life threatening.^[1] The soiling of the adhesive tape used for the ETT fixing and the weight of the breathing circuit can loosen the adhesive plasters, which can result in ETT slippage and dislodgement. Methods to secure ETT for the patients operated in prone position include its suturing,^[2,3] and placing transparent adhesive dressing over the plasters and face.^[4] Several ETT fixation devices have been described.^[5] We describe a simple method of ETT fixation for the neurosurgical patients operated in prone position. Initially, the ETT is fixed with elastic adhesive tapes in conventional manner. Thereafter, another adhesive tape (approximately 50 cm long and 1.5 cm wide) is taped like a sling around the occiput (for cervical spine and cervicomedullary junction procedures) or around the neck (for posterior-fossa procedures and occipital craniectomies), with the ends wrapped around the ETT and then onto the upper or lower lip in opposite direction. The adhesive tape is just taped and not applied tightly. To prevent soiling, the adhesive tapes are covered with transparent adhesive drapes [Figure 1a and b]. We have used this method in 35 neurosurgical procedures operated in prone position. In the later 20 patients, ultrasonography performed after application of adhesive tapes ruled out compromise of lumen of both the internal jugular veins. During surgery, the operating surgeon neither complained of venous congestion or excessive oozing in any patient, nor did we notice excessive oozing. We believe that with this method of ETT fixation, the ETT is well-secured and there is no possibility of its dislodgement.

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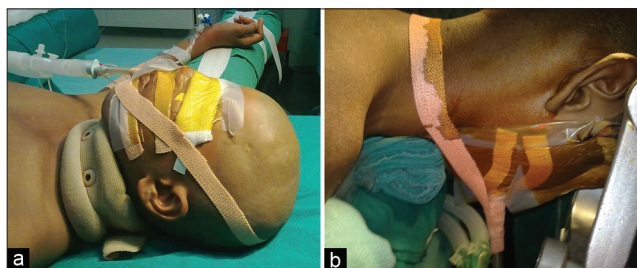


Figure 1: (a) ETT fixation for cervical spine and cervicomedullary junction procedures with elastic adhesive-tape encircling occiput; (b) ETT fixation for posterior-fossa procedures and occipital craniectomies with elastic adhesive-tape encircling neck

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